# Indiana Academic Standards (IAS): Instructional and Assessment Guidance ISTEP+: Mathematics – Grade 10

# Opportunity to Learn

From an assessment perspective, preparing students to be college and career ready necessitates a focus on "Opportunity to Learn." Opportunity to Learn (OTL) refers to equitable conditions or circumstances within the school or classroom that promote learning for all students. OTL includes curricula, learning materials and instructional experiences. In short, OTL supports student success by ensuring student access to both content and instruction.

Opportunity to Learn is both a moral imperative and an ethical responsibility on the part of educators. Indiana teachers have a two-fold obligation with regard to OTL. First, teachers must provide students with OTL for Indiana Academic Standards that are assessed in the classroom and on ISTEP+. Second, and more importantly, teachers must provide OTL in terms of the content that students must learn in preparation for college and careers.

### **Prioritizing Instruction**

In an effort to empower teachers and focus on instructional priorities, the Office of Student Assessment has created this Instructional and Assessment Guidance ("Guidance") document for grade 10. The *Content Priority* of each Standard is delineated in the Guidance as one of three designations:

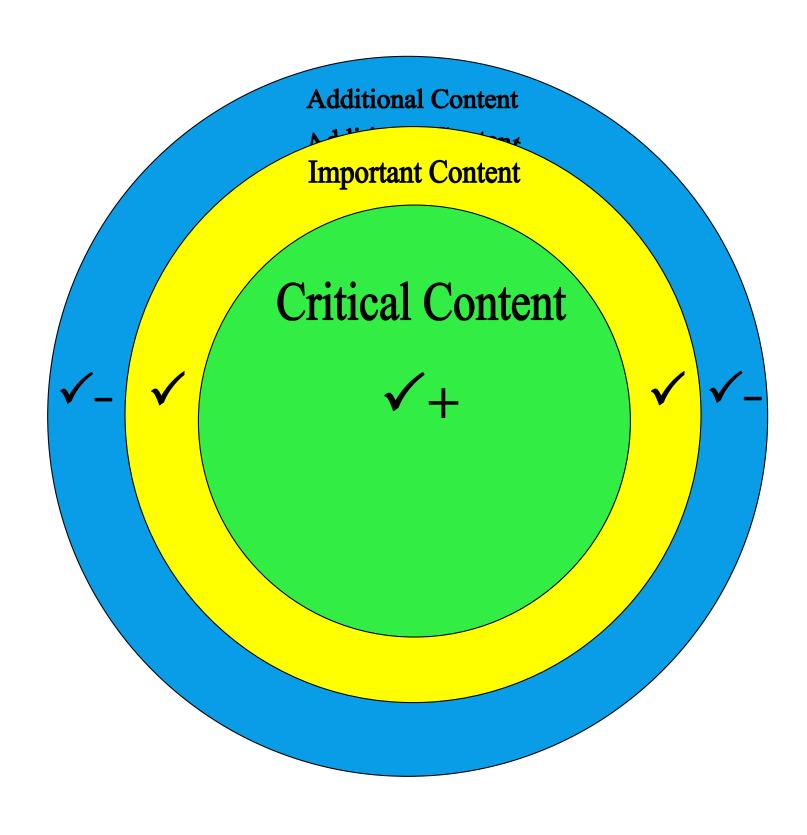
- 1) Critical identified as "√+"
- 2) Important identified as "√"
- 3) Additional identified as "√-"

This Guidance document identifies the knowledge, skills, and abilities that every student must have by the end of grade 10 to be on-track for college- and career-readiness by the time the student leaves high school. The Guidance document is designed to assist teachers in planning and prioritizing instructional time to ensure student success.

It is important to note that the Grade 10 ISTEP+ test is a domain-based test, rather than an end of course assessment. In other words, the Grade 10 ISTEP+ test includes the following mathematics-related topics: *Number Sense, Expressions, and Computation*; *Geometry and Measurement, Data Analysis, Statistics, and Probability; Linear Equations, Inequalities, and Functions*; *Systems of Equations and Inequalities*; *Quadratic & Exponential Equations and Functions*; and *Mathematical Processes*.

#### **A Final Note**

The Guidance document, as well as the Standards themselves, is not meant to be used as a "checklist." Rather, when teachers take into consideration the instructional priorities and deliver rich, meaningful lessons, the Standards come to life in the classroom.



# Instructional and Assessment Guidance ISTEP+: Mathematics – Grade 10

Symbol	Key
<b>√</b> +	Critical Content
✓	Important Content
√-	Additional Content

Number Sense, Expressions, and Computation		Geometry and Measurement		Data Analysis, Statistics, and Probability		Linear Equations, Inequalities, and Functions		Systems of Equations and Inequalities		Quadratic & Exponential Equations and Functions		Mathematical Process	
8.NS.1*	<b>√</b>	8.GM.1	✓	8.DSP.1*	<b>√</b>	8.AF.1	✓	Al.SEI.1	<b>√</b>	Al.QE.1	✓	MP1*	√+
8.NS.2	<b>√</b>	8.GM.2	✓	8.DSP.2	✓-	8.AF.2*	✓	Al.SEI.2	✓	Al.QE.2	√-	MP2*	<b>√</b> +
8.NS.3	✓	8.GM.3	√-	8.DSP.3*	√+	8.AF.3	✓	Al.SEI.3*	√+	Al.QE.3*	✓	MP3*	√+
8.NS.4	✓	8.GM.4*	✓	8.DSP.4	√-	8.AF.4*	✓	Al.SEI.4*	✓	Al.QE.4	✓	MP4*	√+
8.C.1*	√+	8.GM.5	√-	8.DSP.5	✓	8.AF.5	✓			Al.QE.5*	✓	MP5*	<b>√</b> +
8.C.2	√-	8.GM.6*	✓	8.DSP.6	✓	8.AF.6*	✓			Al.QE.6	✓	MP6*	<b>√</b> +
AI.RNE.1	√-	8.GM.7	√-	Al.DS.1	<b>√</b> +	8.AF.7*	✓			Al.QE.7*	✓	MP7*	√+
AI.RNE.2*	<b>√</b>	8.GM.8	✓	Al.DS.2*	<b>√</b>	8.AF.8*	<b>√</b>					MP8*	√+
AI.RNE.3	<b>√</b>	8.GM.9*	✓	Al.DS.3	<b>√</b>	Al.F.1	✓						
AI.RNE.4	✓			Al.DS.4*	√-	Al.F.2*	√+						
AI.RNE.5	✓			Al.DS.5	✓	Al.F.3	✓						
AI.RNE.6*	✓			Al.DS.6	✓	Al.F.4*	✓						
AI.RNE.7	<b>✓</b>					Al.L.1*	√+						
						Al.L.2*	√+						
						Al.L.3*	✓						
						Al.L.4	✓						
						Al.L.5*	√+						
						Al.L.6*	✓						
						Al.L.7*	✓						
						Al.L.8	<b>√</b>						
						Al.L.9	√-						
						Al.L.10	√-						
						Al.L.11	✓						

<sup>\*\*</sup>Please see notes on the following page for additional information\*\*

## **NOTES:**

- Some concepts covered in the Algebra I standards will address, and many times will go beyond, concepts found in the Grade 8 standards. This is especially true in the Linear Equations, Inequalities, and Functions and Data Analysis, Statistics, and Probability reporting categories.
- Grade 8 content that does not overlap with Algebra I content should be taught and will be assessed at a high school level of rigor.
- Grade 8 content is included with the Grade 10 mathematics assessment to not only allow for content that goes beyond
   Algebra I, but to also ensure that all students in the state of Indiana have had access to the content that may be assessed.
- All standards denoted with an \* are eligible to be assessed on Part 1 of the ISTEP+ assessment.